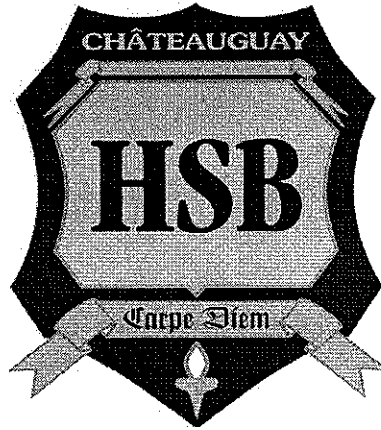


Howard S. Billings Regional High School



**Course Dictionary
2011 - 2012**

Secondary IV

HISTORY OF HOWARD S. BILLINGS REGIONAL HIGH SCHOOL

In the early 1960's, the Howard S. Billings site contained Maple Elementary School, which lay tucked beside McLeod Street and on the corner of Maple and McLeod stood Chateaugay High School.

Launched on a solid educational base inherited from Chateaugay High, September 1967 saw students from Secondary I to V, including Chateaugay's recently amalgamated English-speaking Catholic students, move into the two existing schools. Since facilities could not accommodate the more than 1400 students at one time, shifts were organized whereby the Juniors attended in the forenoon and Seniors after lunch.

Work on the 2400 student 5 million dollar school began in mid-February of 1968. Although construction and teaching went on simultaneously, it was mainly with the commendable adaptability of staff and students, along with the cooperation of the contractor and sub-contractors, that the courses of studies were successfully completed during the construction period.

The "Grand Opening" took place on November 15, 1968, with educational displays by some 500 students at the stellar event. Chateaugay High and Maple Elementary Schools became history as the new complex became Howard S. Billings Regional High School, named after the guest speaker, and then retired Deputy Minister of Education, Dr. Billings.

Already hailed as one of the most advanced Polyvalent schools in the province, it featured some 14 shops, 8 home economics classes, 7 commercial rooms, 6 gymnasias, facilities for music teaching and practice, modern equipped science labs, a Guidance Centre, a chapel for Catholics and Protestants, library facilities for 30,000 volumes that could accommodate 4 classes per period, a 500 student auditorium and 800 seat cafeteria.

Prior to the opening, some 500 Native students from Kahnawake entered Billings, bolstering the ranks that continued to grow. In the early 70's the student body outgrew the planned facilities reaching over 2800. Students were housed in some 100 homerooms and taught by a staff of over 170 teachers, complemented by some 75 technical and support staff and 7 administrators.

High teaching standards and a developing school spirit moved Billings to excel in academics, drama, science fairs, and sports embodied in some 80 extra-curricular school organizations.

The 70's and 80's witnessed a decline in enrolment that eventually saw the former Maple Elementary School become the new home of the Board Office and Adult Education (Nova Career Centre).

Present day Billings offers a variety of programs to cater to the diverse needs of our student population, such as the International Baccalaureate (IB) program, Options Etudes Program (an enriched bilingual middle school program), the Bilingual program, a Differentiated Approaches Related to Education (DARE), and a Work-Oriented Training Pathway program. An Alternative program opened as a "school within a school" in September 1996: Directions is a successful and thriving alternative environment serving the needs of Cycle II (grade 10 & 11) students who have had difficulty achieving success in the traditional classroom setting.

Today, our enrolment is slightly under 1050 students with approximately 60 teachers, Resource and Native Resource support departments, a Student Services – Guidance department with support for students in Guidance counselling & Psychology, Health, Social services, Drug & alcohol intervention, Organizational help & work on behaviour & other issues in SOS (Student Options Service) from our social aide technicians, and liaison support from our local Police department.

HSB Secondary Cycle II (Senior) Learning Paths

Comprised of Secondary III, IV and V students, the H.S.B. Senior School offers three pathways in education to allow for diversification. Within these pathways, there are a variety of programs, such as the English, Bilingual, IB (International Baccalaureate Program) and Work Oriented programs.

Both enrichment and/or remediation may be offered based on students' needs and teachers' referrals. Tutorials are offered by senior students in PALS (Progressive Adolescents Lending Support) after school for students at risk academically or who need help with homework. Advanced courses are offered in Secondary IV and V. An Arts program is compulsory for students at the Secondary III & IV levels.

There is also a comprehensive choice of other courses as options as well as additional Arts options, available from Secondary III on up through Secondary IV and V. Our goal is to ensure that our students are well prepared for their post-secondary choices.

The program for Secondary Cycle Two has four distinctive characteristics:

- It targets the development of competencies by students actively involved in the learning process.
- It integrates all the subjects into a coherent whole focused on major issues of contemporary life.
- It explicitly targets cross-curricular learning, that transcends the boundaries between subjects.
- It calls on the professional expertise of school staff and allows for individual and collective choices.

As part of the Reform in Quebec Education, students going into Cycle II at the secondary level will have three clear Pathways to choose from. The diversification of these Pathways aims to increase student motivation, improve overall learning, and decrease the student dropout rate in the province. It also provides for a variety of educational choices and an exploration of various occupational fields. It is based on the recognition that students are not all the same, they do not learn in the same ways, so a variety of pathways is needed to respect their diversity. These pathways were created to help students develop their personal strengths and lead them on their personal path for success.

The pathways are:

- A General Education Path
- An Applied General Education Path
- A Work-oriented Training Path

The 1st two paths lead to possibilities in Vocational training, and /or CEGEP or college-level studies, followed by entry into the labour market or university studies.

The 3rd path, the Work-Oriented Training Path, offers work-study programs intended to give students practical training for the workplace, while continuing general core education courses adapted to their needs and academic level. This path may lead directly to the job market, **OR** under certain conditions, may lead to vocational training or continued studies in general education.

The General Education Pathway & the Applied General Education Pathways

Both of these paths offer most of the same subjects: English, French, Math, Science, History & Citizenship, Contemporary Economic issues, one subject from the Arts (Drama, Visual Arts, Dance, or Music), Physical Education & Health, and Ethics & Religious Culture. They prepare the way toward a Secondary School Diploma.

The **Applied Education Path** differs from the **General Education Path** with its **two compulsory courses: Applied Science & Technology and the Personal Orientation Project (POP)**. Look at the course description section for more info on these two courses and their contents. For a more in depth explanation, please read the pamphlet entitled, "Which Pathway is Best For Me?"

The following programs exist within the General & Applied Pathways

The IB - International Baccalaureate Program

The International Baccalaureate Middle Years Program focuses on respect for cultures, religions, racial and intellectual diversity to foster a better understanding of others and concerns for international issues. It promotes a holistic perspective to learning and stresses the importance of communication, which in turn develops language skills.

Bilingual Program

The Bilingual Program is designed for the majority of students who have successfully completed the bilingual program in the elementary sector. This program includes French as a Second language, as well as other subjects taught in French such as Geographie, Histoire, Education physique, etc. There is also the grade 9 FSL course). In grade 10, students in a bilingual program continue with certain options in French. In grade 11, students may continue with the regular FSL course and some options in french.

English Program

The English Program is designed for students who have experienced difficulties within the bilingual program at the Secondary Cycle I level (grade 7 & 8). This program is only available in Cycle II. The standardized curriculum of this program includes French as a Second Language in grade 9, 10 and 11. All other subjects are taught in English.

Alternative Program

"Directions" alternative program is designed as a "school within a school" for students going into Secondary 4 or 5 who are encountering difficulties in a regular classroom setting. The students in this program are academically capable yet are considered at risk, in need of a fresh start in an alternative setting. Teachers, administrators and student services professionals recommend students for Directions, whose staff interviews prospective candidates and formulates a list of accepted students. Curriculum and pedagogy focus on goal-setting, teamwork; community building & empowerment to help at risk students regain confidence, experience positive learning experiences and learn skills to become successful students.

The Work-Oriented Training Pathway

A student who is 15 years of age before the 1st day of classes of the coming school year, who has not met the competencies of Secondary Cycle I, may apply to enrol in OR be referred to the **Work-Oriented Training Pathway** if this path is most likely to meet their interests, needs and abilities. This pathway is comprised of two programs: **Training for Semiskilled Occupations** and **Preparation for Employment**.

Training for Semi-skilled Occupations is a 1 year program geared toward students who have achieved the competencies of the Elementary program in English and Mathematics, but have not achieved these competencies at the Secondary Cycle I (grade 7 & 8) level. This program includes English, French and Mathematics, as well as Introduction to the World of Work, and 375 hours of preparation for a specific semi-

skilled trade. There could be some possibility for moving from this path to another should the need or interest arise. **These possibilities will depend on the competencies students have acquired.**

Preparation for Employment is a 3 year program geared toward students who have not achieved the elementary level program competencies for English and Mathematics. This program includes a general education component comprised of the core courses, and a practical training component consisting of an Introduction to the World of Work, World of Work Orientation, and Work Skills.

COURSE SELECTION PROCEDURES

To take place after Term 3 Report Cards

Every student in Secondary 2, 3, and 4 is given a copy of the course dictionary containing all the information needed about compulsory and option courses for the next school year for their grade level. They also receive the course selection sheet and the school registration form to bring home. Students are responsible to:

1. Complete the course option part of their course selection sheet.
2. Have the course option form signed by their parent/guardian.
3. Have parents/guardians correct information that has changed on the registration form, and then sign it.

Students **must return their course selection** and registration sheets to the Guidance office or to the Reception in the Administration office **no later than April 21st, 2011.**

Parents and/or students are welcome to call or make an appointment to meet with the Guidance Counsellor if they wish to discuss course option selections. **Students may request changes to their option selection with parental permission up to the end of June or during course option change period, which starts during the 2nd week of September and runs for 1 week only. Request for Course Change forms must be used.**

When setting your educational goals, and subsequently selecting your courses, you are making a commitment. Great care is required in choosing your options since changing from one option to another later on may be difficult or even impossible. To help you decide which option(s) you might select, please read the next section on High School Diploma requirements, CEGEP entrance and specific program requirements, as well as Adult Education Vocational training program requirements.

Be sure to adhere to the deadline for course selection so that you will not be disappointed. Delay in returning your course option selection form may result in a student not getting their choice of options.

Note: To complete the competencies required in Cycle II Year I necessary to move up to Cycle II Year II (grade 10), a student must be successful in English 306, French 306, Math 306 and either Science 306 or History 306 (a minimum of 60% in each). Then students may move to Cycle II year 1.

Have Questions?

Call the Student Services Department at 691-3230, ext. 340 to speak with the Guidance counsellor, Ms. Lorraine Beaton, or drop in during recess, lunch, or after school to make an appointment or ask questions.

Quebec Secondary School Diploma Requirements for 2009-2010

The Minister of Education, Leisure & Sports (MELS) shall award a Secondary School Diploma under the following conditions: Specifically, a student must:

Earn at least 54 credits from Secondary IV and V credit courses. At least 20 of those credits must come from the Secondary V credit level. The following credits are a compulsory part of the 54 credits required:

- 6 credits in Secondary 5 Language of Instruction (English) 632-506
- 4 credits in Secondary 5 Second Language (French) 634-504
- 4 credits in Secondary 4 Mathematics minimum 563-404 **OR** Mathematics 406
- 4 credits in Secondary 4 Science and Technology 555-404 **OR**
6 credits in Secondary 4 Applied Science and Technology 557-406
- 4 credits in Secondary 4 History and Citizenship education 587-404 **OR** Histoire 087-404
- 2 credits in Secondary 4 Arts education 668-402 **OR** 669-402 **OR** 670-402 **OR** 672-402
- 2 credits in Secondary 5 Ethics and Religious culture 569-502 **OR**
Physical education and Health 543-502

Entrance Requirements for Admission to College / CEGEP

In addition to satisfying the requirements for a Secondary School Diploma (SSD) as stated above, students who wish to pursue their studies at the college level (i.e. CEGEP) must successfully complete the following courses for general admission:

- Secondary 4 Science and Technology 404 (ST) **OR** Applied Science and Technology 406 (AST)
- Secondary 5 Mathematics 504 (preferable) **OR** Secondary 4 Science Mathematics 406 **OR** Tech Science Math 406 **OR** a minimum of Cultural Social Technical Math 404 (the latter may require a 15 hr bridge course for access to certain CEGEP programs)

Note: Many programs have additional course prerequisites. Check the various College websites or program brochures to determine what these additional prerequisites might be. **Be sure to be successful in your courses in Secondary 3 so that you may include some of the more advanced courses in your course selection for Secondary 4 and 5 providing you have the required marks to allow for these choices.** Note: Prerequisites may be subject to change in future years.

****CEGEP program prerequisites are listed below in the next section****

CEGEP Program Prerequisites Information

Many programs in CEGEP require a student to take or have taken specific prerequisite high school level courses in addition to courses required for a Secondary School Diploma or for general CEGEP admission. This information is important for students in Secondary 2, 3, and 4, to encourage them to obtain the academic marks necessary to be able to choose these prerequisite courses and options.

Please check CEGEP program requirements and verify the prerequisite courses in the Prerequisite Table Code in the following pages before choosing your Math, Science, and other option courses. Also verify requirements online at the CEGEP websites.

Prerequisite Table Codes

Code	Course
1	Mathematics 564-506 (Science Math) OR 565-506 (Technical Science Math)
2	Mathematics 564-406 (Science Math) OR 565-406 (Technical Science Math)
3	Science Technology (ST) 555-404 OR Applied Science Technology (AST) 557-406 **
4	Environment-Science Technology (EST) 558-404 OR Science-Environment (SE) 558-402**
Note :	**Science ST & EST should be taken together OR Science AST & SE should be taken together, they are prerequisites for Chemistry 504 and Physics 504
5	Chemistry 551-504
6	Physics 553-504
7	Music 669-502 minimum, preferably Music 669-504
8	Mathematics CST 563-504
9	Mathematics CST 563-404, plus a 15 hr Math 'activity' taken in CEGEP
10	Science & Technology 555-404 OR Applied Science & Technology 557-406

Pre-University Programs (2-year)

Prerequisite Requirements

Science: Health and Pure and Applied	1 + 5 + 6, + high grades (minimum 75% and up)
Science: First Choice or Honours Science	1 + 5 + 6, + high grades (80% to 85% +),
IB Science: Health & Pure and Applied	1 + 5 + 6, + high grades + letter of intent
Science/Music (3 year double DEC)	1 + 5 + 6, + high grades + 7, plus audition, and Theory & Ear Training test
Social Science (Commerce)	1
Honours Social Science	1 + High grades (80% +)
Social Science	9 minimum, 8 is preferable & often required
IB Theatre Arts & Psychology	2 preferable or 8 minimum, + high grades
IB Commerce: Economics, Math & Psych.	1 + high grades
IB Commerce & Computer Science	1 + high grades
IB Commerce & Spanish	1 + high grades
Liberal Arts	80%+ average, letter of intent, + Interview; 8 is minimum
Creative Arts, Literature & Languages	no specific prerequisites, good marks
Fine Arts &/or Visual Arts	Portfolio, and possible Interview
Music	7+ audition + Theory & Ear Training tests
Explorations/Pathways-Prerequisites to Science	65% minimum in 9 (8 is preferable) & 10 at Vanier + letter of intent; 2 + 3 & 4 at John Abbott College;
Developmental Science	1+ 5+ 6 is required at Dawson, marks between 60% & 74%;
Exploration Science	2 + 3 & 4 at Vanier; 2 + 3 at Dawson; both require good marks; 75 % in 8 & 10 at Champlain St Lambert

Career Programs (3 years)

Requirements

Accounting & Management Technology	minimum of 2 is required; 1 is recommended
Adventure Tourism	Physical fitness test + interview
Aircraft Maintenance	1 + 6 with good marks (in English at ENA)
Animal Health	8 + 4, (2 + 5 strongly recommended) + letter of intent
Architectural Technology	2 + 4 with decent marks
Biomedical Laboratory Technology	2 + 5; Interview; medical required, good English & French
Building systems Engineering Technology	2 + 4 + interview
Business Management - Marketing	2, 1 is recommended
Analytical Chemistry/ Laboratory Technology	1+5 + good marks
Civil Engineering Technology	1 + 3 & 5

Computer Science Technology	1
Computerized Systems Technology	2 + 4
Community Recreational Leadership Training Youth & Adult Correctional Intervention	Personal interview + working knowledge of French no specific prerequisites
Dental Hygiene	3+ 4 + 5; 1 is strongly recommended at JAC + medical
Diagnostic Imaging	2 + 4 + interview & medical, & minimum 65% in Eng & Fr.
Information and Library Technologies	no specific prerequisites
Early Childhood Education	no specific prerequisites; volunteer or work experience with children; + letter of Intent required at Vanier
Environment & Wildlife Management option	1 + 5
Engineering Technology (Photonics & Energy)	1 + 3 & 4
Farm Management	no specific prerequisites
Graphic Design	An interview + portfolio
Illustration and Design	An interview + portfolio
Electronics Technology (Communications & Microcomputers)	2 + 3
Industrial Design	2 + 4
Interior Design	An interview + portfolio
Mechanical Engineering Technology	2 + 6
Nursing	4 + 5; 2 is strongly recommended; + Strong in English; + letter of intent & medical
Office Systems Technology	Good marks in English, Working knowledge of French
Police Technology	9 minimum, + Physical tests + probationary driver's license, + Certificate of Good Conduct if over 18 years of age
Professional Music & Song Techniques	Audition + theory + ear test
Professional Theatre – Production/Design	Interview required
Professional Theatre – Acting	Audition- a classical & modern dialogue, + Sing a song
Radiation Oncology	1 + 4 & 5; + interview & medical, 65%+ in English & French
Respiratory and Anaesthesia Technology	2 + 5 + English placement test result, letter of intent + interview + immunization
Social Service	Working knowledge of French, + volunteer experience is required + testing, & interview
Special Care Counselling	Personal Interview + volunteer work + letter of intent + immunization record is required
Tourism	Working knowledge of French
Adventure tourism	A resume; letter of intent; medical certificate; & an interview

For other programs not mentioned here, go to the college websites, check in Academic or Career Programs for descriptions and specific prerequisite course requirements. Here are some sites:

Champlain Regional College (all Campuses)	www.champlaincollege.qc.ca
Dawson College	www.dawsoncollege.qc.ca
John Abbott College	www.johnabbott.qc.ca
Vanier College	www.vaniercollege.qc.ca
Marianopolis College	www.marianopolis.edu
Heritage College (Hull)	http://www.cegep-heritage.qc.ca/

For info about admission to French language CEGEPs in Montreal & the surrounding areas, go to the Service regional admission metropolitain at www.sram.qc.ca; for the Quebec & the Gaspé areas, go to www.sraq.qc.ca

Professional Vocational Education

One of the toughest questions students face is what to do after high school. It used to be that the choices were work or CEGEP. Trade schools were also an option but they were often expensive or not highly regarded. In the last decade or two, different options were being provided for residents of Quebec. Professional Vocational Education is available at Adult Education Centers around the province in both English and French. Today in the labour market, these trained technicians are highly sought after due to shortages in skilled labour.

We are lucky to have two of these centers right here in our school board at the Nova Career Centre in Chateauguay or the Chateauguay Valley Career Education Centre in Ormstown. The philosophy of these centers is learning by doing. Learning is done in realistic settings with state of the art equipment. Upon completion of a training program, a secondary diploma from the Ministry of Education is given. These programs are attractive because graduates are well prepared for the labour market.

All programs are tuition free for Quebec residents who have the appropriate prerequisites as recognized by the Ministry of Education. The requirements for entrance into a Professional training program are:

- Have a Secondary School Diploma (DES), **OR**
- Be 16 years of age as of the 30th of June of the year they wish to enter an Adult program, **AND**
- Have obtained Secondary IV credits in English, French 2nd language and Mathematics.

Note: A few programs require only Secondary III level French, English and Math.

In the New Frontiers School Board, the following day programs are offered –

At CVCEC:

Accounting
Business Technology (Administrative Assistant)
Construction Carpentry
Home Care & Family and Social Assistance
Landscaping Construction
Nursing Assistant
Starting a Business

Evening Programs:

Carpentry
Home Care

At NOVA:

Accounting
Administrative Assistant
Automotive Technician (mechanics)
Hairdressing
Interior Decorating & Display
Residential & Commercial Drafting
RV Maintenance & Repair
Welding Assembly
Pipe Welding
Starting a Small Business

For more information about any of the CEGEP technology career programs or any of the Adult Education Professional Vocational programs or other Technical and/or Vocational programs offered elsewhere in the province, please contact our guidance counsellor, Lorraine Beaton in Student Services (Guidance) at (450) 691-3230, ext 340. You may also contact a guidance counsellor at an Adult Education Center or go to the Minister of Education's Professional & Vocational Training website for more information on all Vocational and Technology Career programs offered in the province at www.inforoutefpt.org

Cycle 2 year 2 (Secondary 4 – grade 10) Compulsory Courses

NOTE: In Secondary 4, the student continues to have a choice between the General Education Path and the Applied General Education Path. In the General Education Path, students will take Science & Technology 555-404 + an option such as Environmental Science & Technology 558404. In the Applied Science & Technology Path, students will choose Applied Science & Technology 556-406 + an option such as Science & Environment 557-402. These combinations are essential if a student wishes to take Chemistry and Physics in Secondary 5. These science courses are prerequisites to many CEGEP programs, in particular, any Science related program. Otherwise other option selections may be chosen.

English Language Arts

In the Secondary Cycle II English Language Arts program (SELA2 or English for grades 9, 10, 11), students develop competencies in oral communication, reading and writing. They have many opportunities to interact in class, to listen, to read, and to produce a broad range of media, and oral, written and visual texts. This is basically a literacy program which prepares students to make intellectual and aesthetic judgments, raise questions, articulate their thoughts and respect the ideas of others. Discovering writers, exploring and analyzing texts, and discussing their understanding and interpretation of these texts with their fellow students help students to consolidate and increase their language knowledge.

Students learn that every text is a deliberate, social construct. As they consider how a writer persuades a reader, they learn that meanings are designed with very specific intentions in mind.

The SELA2 program promotes the importance of reading and production to develop personal interests, as well as for learning and pleasure; the use of technology in reading and producing texts; enrichment in problem-solving strategy and formal occasions for self-evaluation as a means for students to monitor their progress, reflect on their learning and establish future learning goals.

Talk is central to individual and social processes of making meaning, as students learn to extend their views, opinions, preferences and knowledge in dialogue with the teacher and their peers. Varied opportunities to use talk to learn and to communicate reinforce the sense of community in the classroom, and the importance of exchanges with peers and teacher to the development of students' literacy.

SELA2 is meant to provide:

- Opportunities for students to work both individually and collaboratively
- Regular and sustained periods for students to read and produce texts for pleasure and to learn
- Opportunities for students to work in situations that integrate aspects of all three competencies
- Opportunities for students to read and produce a balance of spoken, written and media texts
- Access to texts that reflect and expand personal interests and preferences
- Student choice regarding projects, activities, and the topics/subjects for reading and production
- Regular opportunities and time for students to reflect on literacy and learning and to self-evaluate

English Language Arts

MELS Code 632406
6 credits – Secondary 4

The Secondary 4 English program develops the students' competencies in oral communication, reading and writing and critical viewing. Students will read novels, plays, and short stories in some depth, attempting to interpret texts for underlying meaning. Discussion of characters, themes, and plot is important. Poetry is read, discussed, and written. Shakespeare is read in some Secondary IV classes.

Students will continue to develop their creative and expository writing skills. They will become more familiar with essay writing and become skilled in library and Internet research. Oral competency is developed through extemporaneous and planned class presentations and speeches.

French

French Second Language
Bilingual & English Programs

MELS Code 634404
4 credits – Secondary 4

All levels follow the new program as outlined by the MEQ. Every student attending H.S.B. has a textbook, workbook, and reading book. We strongly recommend the purchase and use of a “Bescherelle” for verbs and a French-English dictionary.

The goal and design of the Regular French program at the Secondary 4 level is to improve oral skills, and to encourage reading correctly, writing properly, and having a better understanding in French.

634-410 Interaction orale 40 %
634-420 Compréhension orale et écrite 30 %
634-430 Production écrite 30 %

Mathematics

Mathematics 404 - Cultural, Social and Technical Option (100 hours)
Prerequisite: 60% minimum in Math 306

MELS Code 563404
4 credits – Secondary 4

This course is designed for students who are heading towards professional training, technical and trade programs, as well as pre-university programs in Arts and some Social Science programs. Emphasis will be on performing tasks, interpreting the results and applying them to real life situations.

The course is broken down into the following sections: Algebra, Statistics, Probability, and Geometry.

- The Algebra section covers two variable linear inequalities, properties of functions, various functions, and systems of linear equations.
- The Statistics section covers single variable distributions, percentiles, and mean deviation as well as two variable distributions through linear correlation. Students will also construct tables and graphs to illustrate and aid interpretation of data.
- The Probability section covers interpretation of probability situations, odds, fairness and mathematical expectation.
- The Geometry section covers analytic geometry, isometric and similar triangles and trigonometry.

Note: Students must achieve a minimum of 60% in Mathematics 563-404 to advance to the Cultural, Social & Technical Mathematics 563-504 course in Cycle 2 Year 3 (grade 11).

Mathematics 564-406 – Technical and Scientific Option (150 hours)

MELS Code 564406
6 credits – Secondary 4

Prerequisite: Students must achieve comprehensive competency development in Mathematics 306. Math Department recommendation is required. A minimum of 75% in grade 9 is recommended.

This course is designed for students who are heading toward technical programs in many fields at CEGEP, as well as pre-university programs in technologies and sciences. Emphasis will be on not only performing tasks but on interpreting the results, finding errors and solutions, introduction of technological instruments and working with case studies from an economic and scientific context.

The course is broken down into the following sections: Algebra, Statistics, Probability and Geometry:

- The Algebra section covers radicals, powers, inequalities, quadratics, exponential, greatest integer, periodic and step functions, and systems of linear equations
- The Statistics section covers measures of dispersion, mean and standard deviation, correlation and regression.
- The Probability section covers conditional probability, fairness, odds and mathematical expectation.
- The Geometry section covers distance, internal division, lines, and metric and trigonometric relations in right triangles.

Note: Students must achieve a minimum of 60% (preferably 75%+ or higher) in Mathematics 564-406 to advance to the Technical & Scientific Mathematics 564-506 in Cycle 2 year 3. These marks also affect CEGEP applications and conditional acceptance into Science or Technology related programs.

Mathematics 565-406 – Science Option (150 hours)

MELS Code 565406

6 credits – Secondary 4

Prerequisite: Students must have achieved comprehensive competency development in Mathematics 306. Mathematics department recommendation is required. A minimum of 75% in grade 9 is recommended.

This course is designed for students who are heading toward technical programs in many fields at CEGEP as well as pre-university programs in technologies and sciences. Emphasis will be on not only performing tasks but on abstract theorizing, origins and functionality of certain phenomenon, research procedures and subject matters from the field of science.

The course is broken down into the following sections: Algebra, Statistics, and Geometry:

- The Algebra section covers inequalities, greatest integer and quadratic functions, systems of linear and semi linear equations.
- The Statistics section covers correlation, regression and coefficient.
- The Geometry section covers equivalent figures, lines, distance and metric and trigonometric relations in triangles (sine, cosine, tangent, sine and cosine laws)

Note: Students must achieve a minimum of 60% (preferably 75%+ or higher) in this Mathematics 565-406 to advance to the Science Mathematics 565-506 in Cycle 2 year 3.

In certain cases, if along the way, a student's ambitions or interests change, they may still have the opportunity to opt out of one pathway and into another. Additional bridge course hours would be required.

Mathematics 410 Special Option (credits are obtained only in the 2nd year of this course)

This program is designed for students who did not successfully meet all the competencies in Mathematics 306 in Secondary Cycle 2 Year 1 and are struggling in mathematics. The course will cover the same material as

the Cultural, Social and Technical Mathematics 404 course, but it will cover it over a two-year period. This allows students more time to attain the minimum Mathematics graduation requirements.

Note: General entry into CEGEP requires a minimum of a successful completion of Math 563-404 (*this course will require a 15 hr bridge course in order to access certain CEGEP programs*). Other CEGEP programs may require higher levels of Math as prerequisites.

Science

Science & Technology - General Education Path

MELS Code 555404
4 credits – Secondary 4

This program helps students develop their scientific and technological literacy, enabling them to become active, critical and informed participants in debates on social issues, to use the products of science and technology responsibly and to take concrete, practical and innovative action in these areas. The central themes deal with elements of the environment (climate change, energy resources, drinking water, deforestation). The program integrates five scientific fields (astronomy, biology, chemistry, geology, and physics) and technology.

Note: Students who wish to take Chemistry and/or Physics Science options in Cycle 2 year 3 (grade 11) required for CEGEP Health and Pure & Applied Science programs must also take the 4 credit option course in Environmental Science & Technology 558404 in the General Education Path.

OR

Science & Technology – Applied General Education Path

MELS Code 557406
6 credits – Secondary 4

This program helps students develop their scientific and technological literacy, enabling them to become active, critical and informed participants in debates on social issues, to use products of science and technology responsibly and to take concrete, practical and innovation action in these areas. The central themes deal with elements of the environment (climate change, energy resources, drinking water, deforestation). The compulsory concepts studied pertain to the applications related to different technological fields. The program integrates five scientific fields (astronomy, biology, chemistry, geology, and physics) and technology.

Note: Students who wish to take Chemistry and/or Physics Science options in Cycle 2 year 3 (grade 11) required for CEGEP Science programs, such as Health and Pure & Applied must also take a 2 credit option course in Science & the Environment 558-402 in the Applied Education Path.

Social Studies

History and Citizenship Education

MELS Code 587404
4 credits – Secondary 4

The program is a study of the History of Quebec and Canada from its earliest settlements to the present. Included in this course is the growth of responsible government, Confederation, growth of autonomy and Canada's position in past and present world affairs.

Note: History is compulsory for all students and is required for graduation.

The History of Quebec and Canada course is concerned with educational objectives dealing with knowledge, abilities, and attitudes. At the conclusion of the course, the students should:

- Understand the main political, social economic, cultural and religious factors which have shaped Quebec within the Canadian context
- Have developed intellectual skills useful in the historical approach
- Be aware of the diversity of social groups, and of the existence of interdependence and conflict
- Have developed the ability to analyze their personal values and those of their social milieu
- Have developed open and respectful attitudes toward values which are different from their own
- Have become aware of their role as citizens responsible for the future of the community

Creative Arts Compulsory Courses - Required for graduation

Dance IV

MELS Code 672402
2 credits – Secondary 4

This course is designed to enable students to appreciate many different types of dance. They will have an opportunity to perform & teach creative dances, as well as interpret nonverbal movements, and read simple choreography steps. Students will also learn a variety of popular social dances. Dance clothing is required.

Drama IV

Prerequisite: Secondary 2 and 3 Drama

MELS Code 670402
2 credits – Secondary 4

Drama 4 continues the “Method” acting process. A textbook is introduced and 24 chapters of notes will be covered. There are term evaluations as well as a final June evaluation. Term projects will be done during two of the four terms. By now, the students are familiar with stage terms, scripts, acting technique and the value of body & vocal warm-ups. Improvisations are at a more difficult level and are derived from what is learned in each chapter of the text. Criticism is an essential part of developing competence. Students work on improvisations and on memorized scenes that are performed at the end of each term. During one term, they will thoroughly study one full length play. Students should also be auditioning for any acting parts available in school plays, concerts or in other classes.

Music IV

Course Fee: \$20 - \$30 approximately

MELS Code 669402
2 credits – Secondary 4

Students are expected to continue to work on their concert band instrument and to further develop their ability to compose and perform. In order to fulfill the competency of appreciation, students will attend various cultural field trips to help enrich the program. Students will also participate in the music program’s major concerts and they will need to practice their instrument on a regular basis.

Visual Art IV

Course Fee: Approximately \$50 for art material and supplies

MELS Code 668402
2 credits – Secondary 4

Students will explore a variety of art materials to create painted self-portraits, assemblages & collages, charcoal sketches, papier-mâché sculptures, origami, pastel illustrations... etc. Students may gain inspiration from artists throughout history, from the Neanderthal cave paintings to Andy Warhol's Pop Art. There is the possibility of field trips to visit Montreal Museums.

Additional Compulsory Courses

Physical Education

MELS Code 543402

2 credits – Secondary 4

Physical Education is a compulsory course for all students as prescribed by the Department of Education. The course focuses on skill development in team and individual sports as well as basic knowledge and rules of the games. One's personal physical fitness will be stressed. Students must wear gym shorts, T-shirt, socks, and proper footwear. HSB gym wear is available for purchase.

Each term, students will be given a written test, a practical test and a fitness test. Tests will account for 60% of their physical education mark. The remaining 40% is based on overall effort, attitude and sportsmanship, participation, and conduct.

Permanent or long-term exemptions can be made for the chronically ill. Temporary exemptions can be made for students who are medically unfit for a week or more. In both cases a note from the doctor must be brought in attesting to the condition and given to the Physical Education teacher who will turn them over to the School Nurse. Short-term exemptions can be made for students who are unable to participate in Physical Education on a given day. A note from a parent or guardian stating the reason is necessary.

Ethics and Religious Culture

MELS Code 569404

4 credits – Secondary 4

This program promotes the development of three competencies to enable students to:

- Reflect on ethical questions
- Demonstrate an understanding of the phenomenon of religion
- Engage in dialogue

The interrelations between the competencies are numerous and contribute to attaining the program objectives, i.e. the recognition of others and the pursuit of the common good. With rigorous dialogue on ethical questions & topics dealing with the phenomenon of religion, the result is a respectful awareness of persons, their attitudes and their actions. It allows for seeking out common values, valorizing projects that foster community life and the promotion of democratic principles and ideals inherent in Québec society.

In Secondary Cycle Two, students address new aspects of ethics, religious culture and dialogue using complex topics for reflection. Their understanding of what constitutes values & norms should thus enable them to identify large numbers of ethical questions or significant challenges related to the future of humanity, tolerance, justice and human ambivalence. Students explore the symbolic and experiential dimensions of religion, and the study of important periods in the development of religious traditions. Also they acquire a greater facility in the practice of dialogue and more easily master its various components.

Secondary IV Option Courses

Science options

Environmental Science & Technology
General Education Path

MELS Code 558404
4 credits – Secondary 4

The program emphasizes scientific skills and citizenship, paying special attention to the development of students' critical judgment. This course will address addition concepts, methods and attitudes dealt with in the Science & Technology course. It also includes the issues of energy, residual materials and food production.

NOTE: *This course is a prerequisite for Chemistry & Physics options offered in grade 11 and must be taken together with the regular Science and Technology 404 course.*

English, Social Studies & Language Options

Film Studies

MELS Code 663442 &
663452
4 credits – Secondary 4

This is a two-part course is about telling a story through the medium of film. We will examine the history of film-making from its earliest moments to today, paying special attention to the choices directors and editors make to achieve the results we see on the screen. There are two parts to this course.

In this course, you will watch, discuss, and analyze several of the greatest stories ever told. Then you will learn to use some of the techniques you have discovered to produce your own music video and short film.

Journalism

MELS Code 630474
4 credits - Secondary 4

Prerequisite required: Candidates for grade 10 Journalism must hold a 75% average in English. Writing skills will serve as a base for this cross-curricular course that involves creating a journalism project

Classes will be devoted to developing projects using cross-curricular competencies. Students will participate in each step of newsroom production, using information and communications technologies such as computers and digital photography. Students will research articles, prepare for and conduct interviews, go on photography assignments, develop editing skills, develop public relations skills, solve problems together as a "newspaper staff", design lay-out and acquire skills in desktop publishing.

Work will be created in a newsroom setting in conjunction with the input of the community. Guest speakers from the local community and those experienced in journalism will enhance the learning experience.

Introduction to the Sociology of Sport

MELS Code 548444

Prerequisite: Successful pass in competencies for Cycle II Year I - grade 9

4 credits – Secondary 4

This course is designed to introduce students to the concepts of sport and physical activity in society. The competencies that will be measured involve ethics and culture. They will measure whether the student can:

1. Reflect on ethical questions in sport
2. Demonstrate an understanding of the phenomena
3. Engage in constructive dialogue

There is no physical activity in this course. Course content and concepts to be studied will include:

- Sports psychology
- Education in sport
- Economics and sports
- Gender and sports
- Politics and sports
- Violence and sports
- Media and sports
- Youth and sports
- History of sport

Home Economics

MELS Code 620564

Course Fee: Approximately \$20 - \$30

4 credits – Secondary 5

The Home Economics course is comprised of both theory and labs. The units of theory include an examination of the elements of healthy eating, budgeting practices and home decorating. The labs involve application of theory in the kitchen as well as practical hand sewing techniques. A machine-sewed article along with other hand made crafts will be taught.

Spanish, Introduction to

MELS Code 641454

4 credits – Secondary 4

This course will introduce the students to the Spanish language and the Hispanic culture (history, traditions/customs, schedule, music, food, etc). Students will learn how to interact in Spanish in various daily situations such as asking for directions and going to the restaurant. Students will gain knowledge of the Spanish language by using present, future and past verb tenses. Moreover, they will learn vocabulary, expressions as well as some differences between the languages in different countries where Spanish is spoken. Students, by the end of the school year, will be able to understand and speak conversationally in Spanish.

Physical Education Options**Advanced Physical Education**

MELS Code 546444

4 credits – Secondary 4

Prerequisite: Successful completion of Physical Education 543-302 or 043-302, and Phys. Ed. Dept approval

This course is designed to introduce and develop a student's knowledge of physical education as well as physical fitness. The curriculum is an extension of the grade 10 physical education curriculum with specific focus on skill development and theory. A student will continue their interest in physical education by learning about nutrition, first aid and basic human anatomy. Moreover, an introduction will be made to sports beyond the scope of the compulsory physical education curriculum.

The course is available to Secondary IV students who fulfill the following criteria:

- Students must have a mature approach to physical education.
- Students must have a sincere interest in learning about physical education and physical fitness.

Basketball I

MELS Code 548444
4 credits – Secondary 4

Prerequisite: Successful completion of Physical Education 543-302 or 043-302, and/or Physical Education Pedagogical Coordinator approval.

This course will take an in-depth look at the game of basketball. The many aspects of the game will be analysed, including coaching, scoring, timing and refereeing. Students will also have the opportunity to further their defensive and offensive skills.

Introduction to Health and Fitness

MELS Code 546444
4 credits – Secondary 4

Prerequisite: Successful completion of Physical Education 543-302 or 043-302, and have Physical Education Coordinator approval.

This course is a female-centered introduction to fitness and healthy living. Students will be introduced to a variety of physical activities that will help them to develop a plan to improve and maintain their personal fitness training program. All students of varying degrees of fitness are welcome. Students will be introduced to Pilates, step aerobics, free weights, and yoga as well as classroom theory about the many issues and concerns surrounding female health. Guest speakers and field trips will also help students to gain a better understanding of their lifestyle choices and how those choices affect their health and fitness.

Introduction to Golf

MELS Code 548444
4 credits – Secondary 4

The focus of this course is to introduce students to the game of GOLF. Students will learn about the different components of the golf swing as well as the specialty shots. Students will also learn about golf theory, including the different rules of the game as well as the etiquette of the sport.

Videos and video-taping will be used throughout the year to help students learn and improve their technique. There will also be a number of field outings where students will be able to go to a practice facility, as well as a golf course. **Course fee: Approximately \$50.00**

Creative Arts Option Courses

Dance IV

MELS Code 672404
4 credits - Secondary 4

This course is designed to enable the student to appreciate many different types of dance, perform and teach creative dances and interpret nonverbal movements. The course will also teach the student common dance vocabulary and how to perform some of the more popular social dances.

Drama IV

MELS Code 670404
4 credits – Secondary 4

Prerequisite: Secondary 3 Drama

Students should now be self-motivated and interested in directing, acting, designing & building sets, and writing. Individual paths of learning can be accommodated. Notes and quizzes on all aspects of theatre will be done in class. **Basic training will not be done here.** Improvisations will be harder with harsher criticism.

Stage make-up and costuming, as well as other theatre related projects will be term projects for students. The acting lessons are designed for fine tuning the portrayal of diversified characters in different circumstances. Students will work on believable action, handling special stage movement, love scenes, death scenes, character make-up, masks, voice training, pantomime, monologues and soliloquies. The student will do vocal and body work without prompting from the teacher. They should be commanding lead roles in any of the school plays or drama related LESs available to them. They should be inventing and creating drama related projects for the Quebec Entrepreneur Contest. The teacher should now be learning from the students.

Music IV

COURSE FEE: Approximately \$60 To \$80

MELS Code 669404

4 credits – Secondary 4

This course is for students who wish to pursue music in depth. Students are encouraged to continue on their concert band instrument and they will further develop their ability to compose and perform. They are expected to work individually, developing a wide and varied repertoire of solo pieces (their choice and the choice of the teacher), in addition to performing in small and large ensembles of like and mixed instruments. Students will be expected to perform and practice their instrument regularly. This course is also for students who wish to prepare for entry into music at the CEGEP level.

Students will attend a wide variety of cultural musical events and are expected to help plan and carry out musical projects. They will also have the opportunity to meet with professional musicians and will explore various careers associated with music other than performance.

Visual Arts

COURSE FEE: Approximately \$50 on art material and supplies

MELS Code 668404

4 credits – Secondary 4

Art-making inspired by Art History. This course is an exploration of a variety of art materials and art styles. Personal projects could include book-making, photo essays, sculpture, comic strips, animation, painting portraits, work in sketchbook... etc. For students interested in Visual Arts programs at the CEGEP level, an art portfolio can be developed. There is the possibility of field trips to visit Montreal Museums.

Career Exploration Options

The Personal Orientation Project (POP)

MELS Code 606404

4 credits – Secondary 4

POP or the Personal Orientation Project is a course that is designed to help students explore, reflect and discover various fields that might interest them by accessing pedagogical resources and by actively trying out a variety of work functions. This process should help students to develop their career identity or identities that they can carry throughout their lives as a result of the foundation of new competencies that they will acquire.

Students will develop between three to eight career exploration projects on an individual basis by using “tool kits”, by consulting career resources, job shadowing, and visiting educational institutions. They will use a ministerial Web site that offers them a virtual resource library of specific experiential tools, virtual visits, and key resource people. Students will reflect on their own career exploration and that of their classmates, on their own or with other classmates, parents, and other trusted people so that they can consider possible career paths.

With the help of community partners, parents, and the school community working together, students should be able to complete the POP course with some identified career possibilities in sectors/fields of interest with the knowledge that these possibilities fit well with their personal characteristics, interests, and aptitudes.

POP should help students to adopt a career/life management approach throughout their lives as a consequence of the new attitudes and competencies they have acquired.

Exploration of Vocational Training

MELS Code 617544
4 credits – Secondary 5

Exploration of Vocational Training or Explo offers students the opportunity to become familiar with the vocational training sectors and the world of work. Explo is a process that contributes to a students' development of their career identities by having them think about their future, identify their aptitudes, aspirations and keenest interests and consider the *possibility* of themselves as future workers. Students are encouraged to follow their career path whatever it might be.

Students will learn, as a class, in a group, or individually about all the vocational sectors by gathering information from various sources such as the Internet, documentation, workers; participating in experiential activities such as trying out tasks associated with a trade or occupation; observing trades and occupations through job shadowing, and visits to the vocational training centre and more.

Students will use ministerial Web site offering a virtual resource library of specific tools such as experiential tools, virtual visits, key resource people. They will be able to reflect on their suitability for vocational training, either on their own, with classmates, parents or other trusted people and considers the *possibility* of enrolling in vocational training.

With the help of community partners, parents, and the school community working together, students will be able to be involved in meaningful exploration opportunities and have access to resources and information relevant to their communities and needs. They will also be able to contemplate career possibilities in trades and occupations with the knowledge that these opportunities fit with their personal characteristics and aptitudes without yet having to make any final decision.